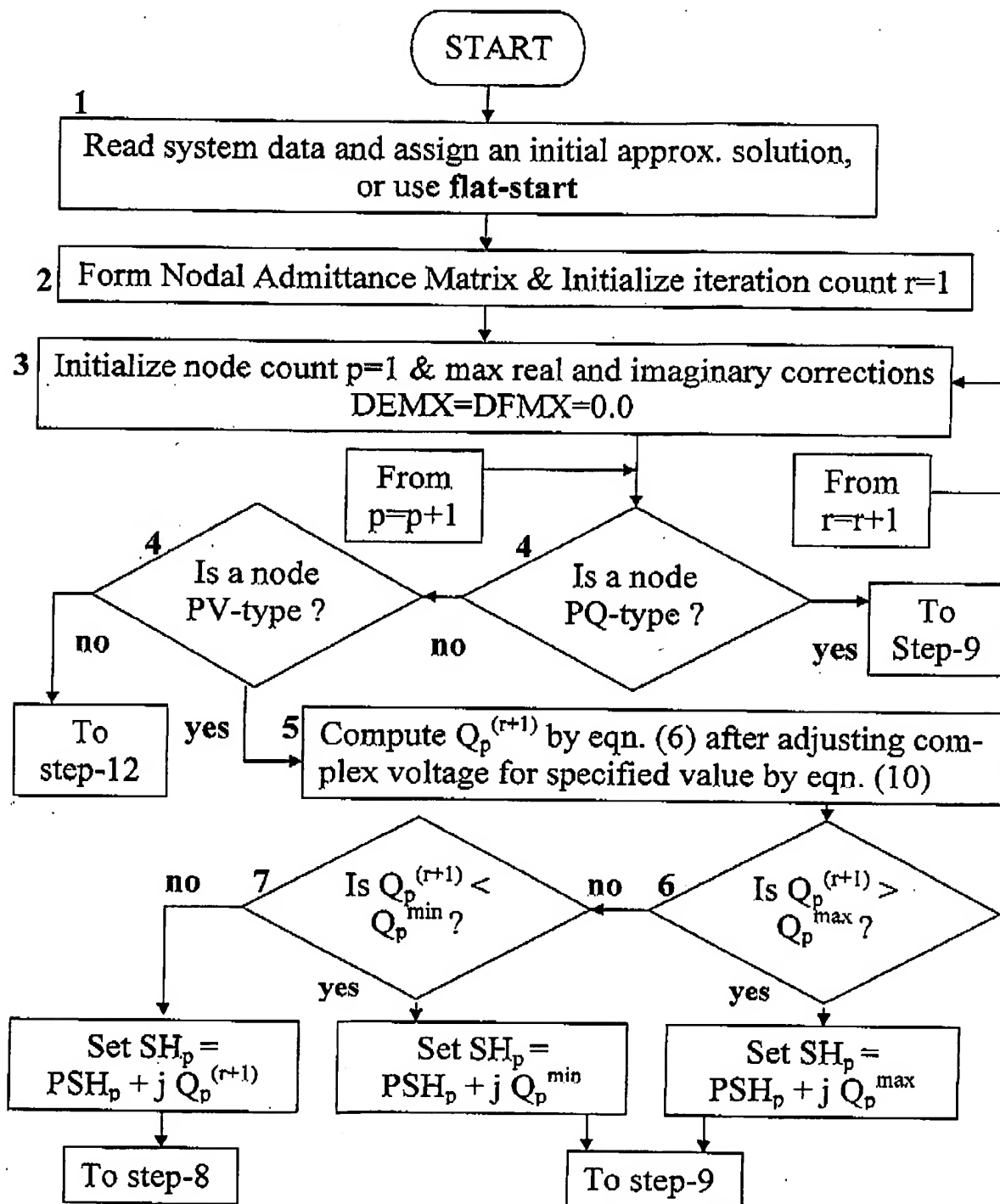


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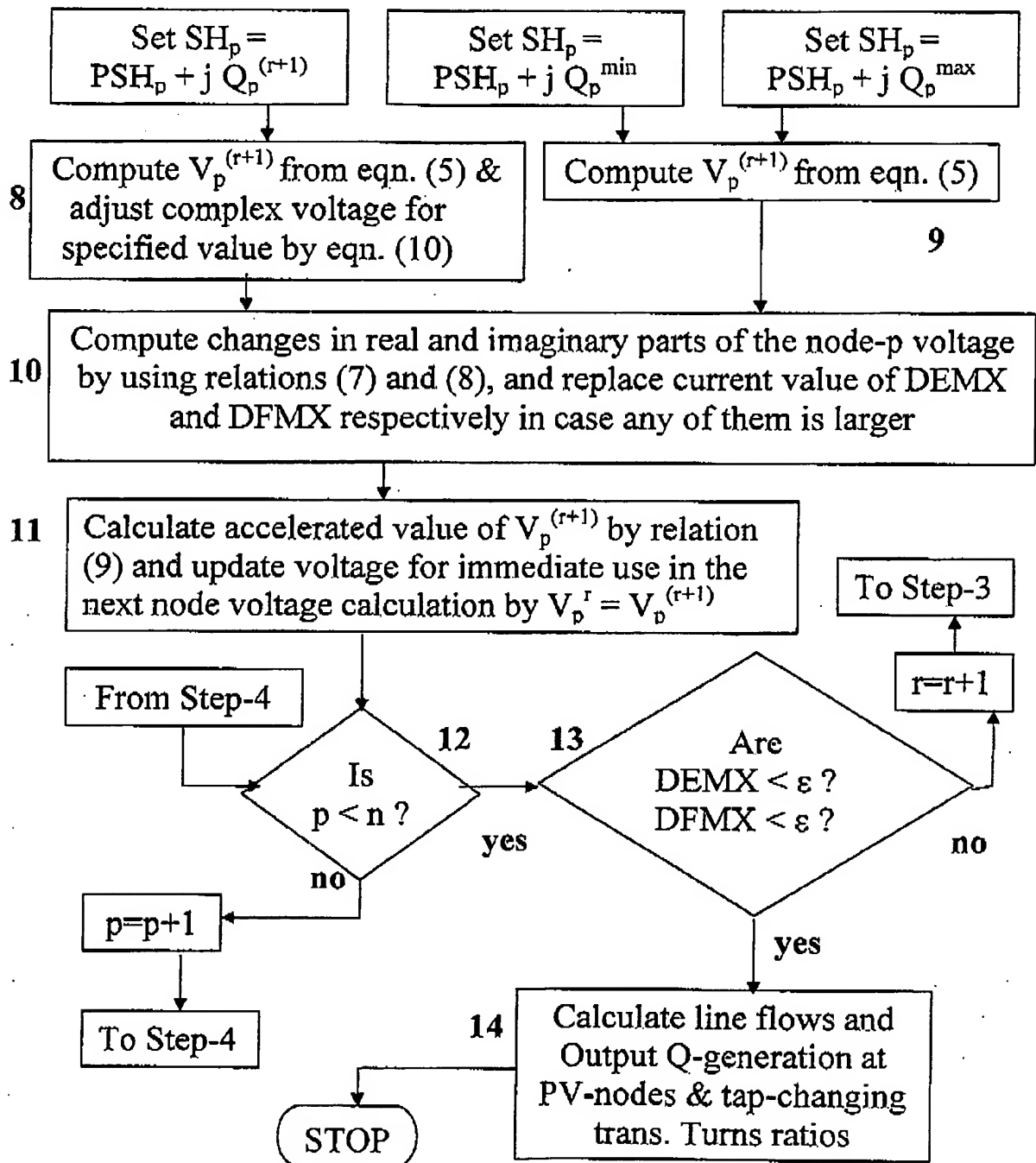


**Fig.1a: Prior Art: Flow-chart of Gauss-Seidel Loadflow (GSL) Method**

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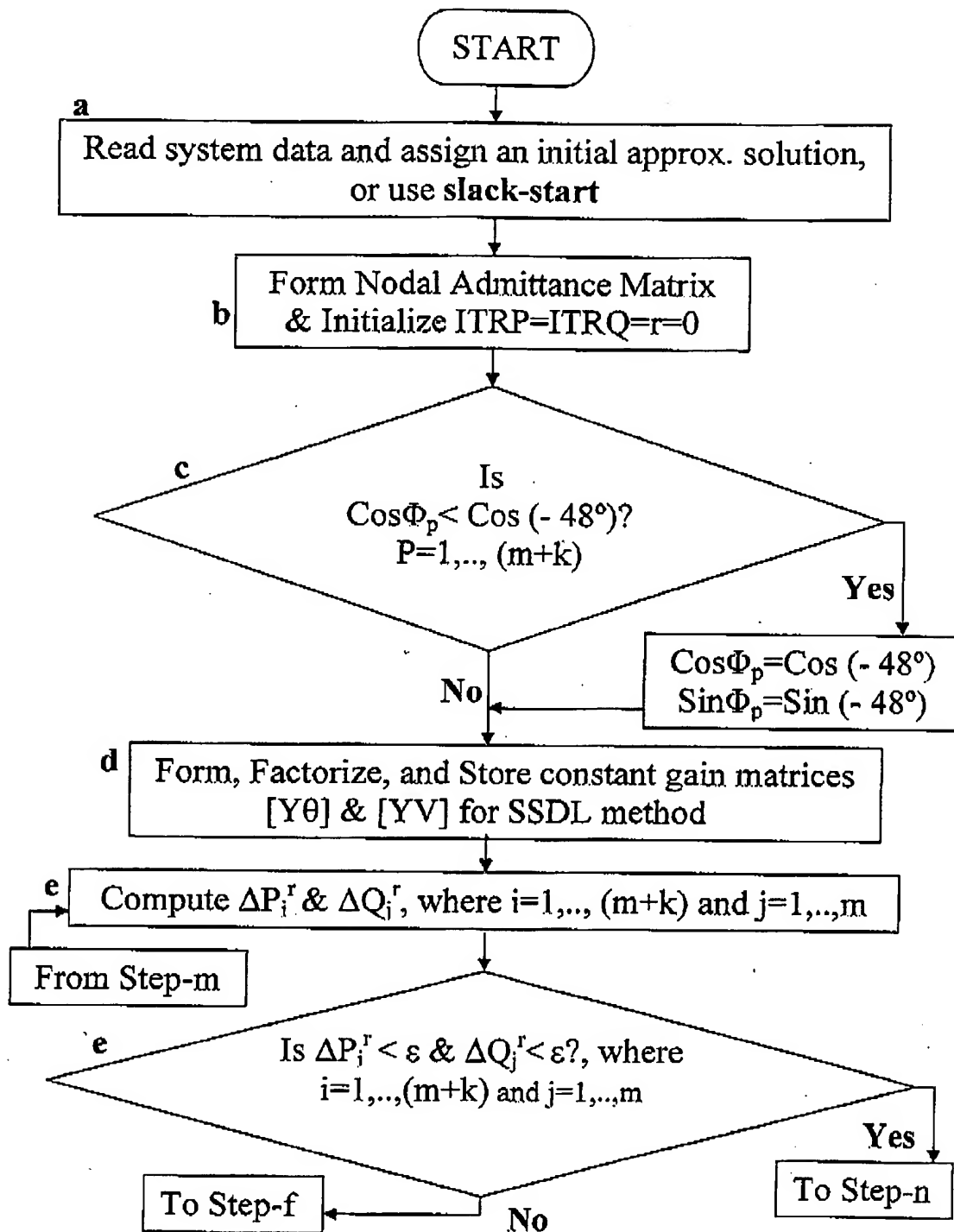


**Fig.1a: Prior Art: Flow-chart of Gauss-Seidel Loadflow (GSL) Method**  
(Cont.)

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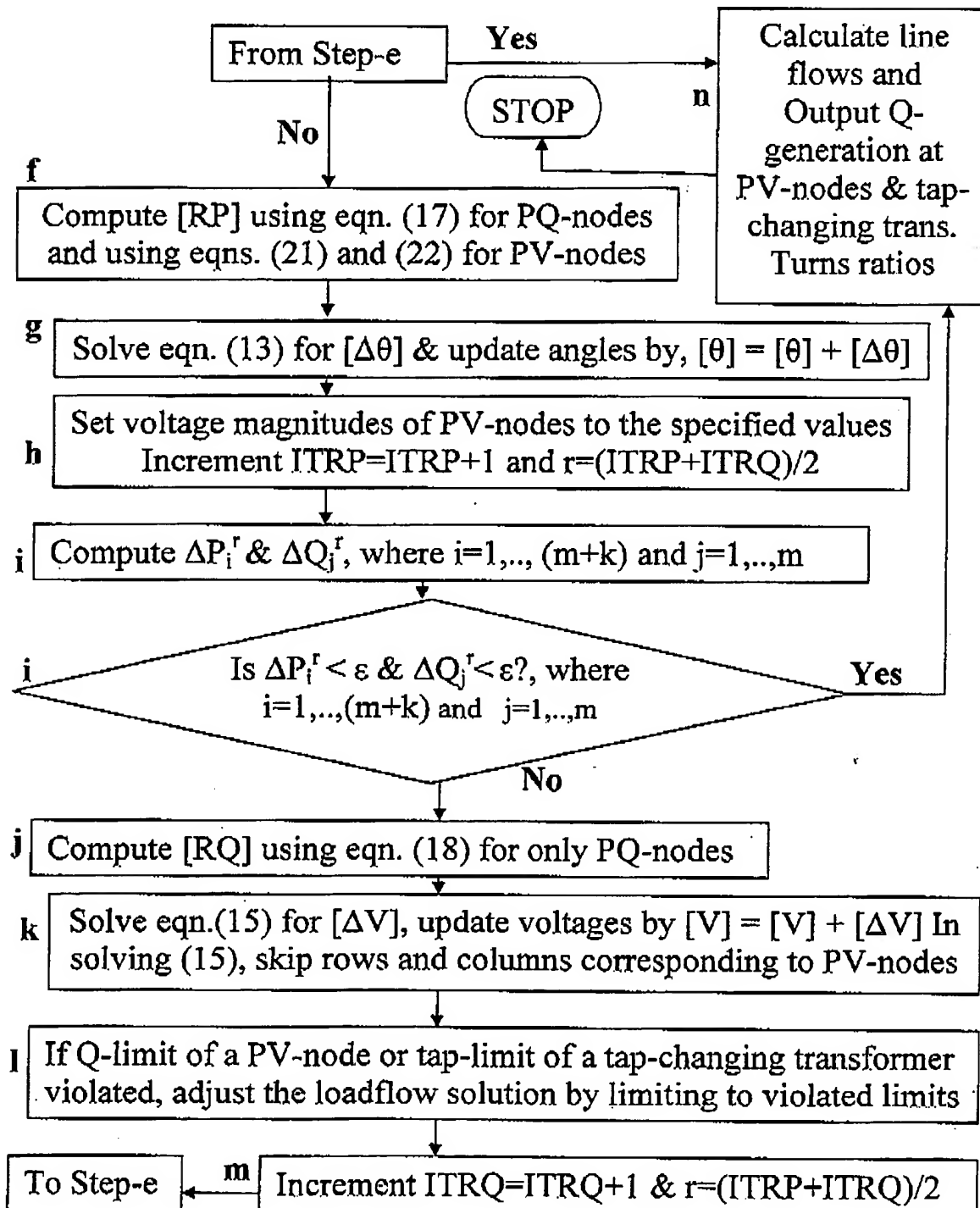


**Fig.1b: Prior Art: Flow-chart of Super Super Decoupled Loadflow (SSDL) method**

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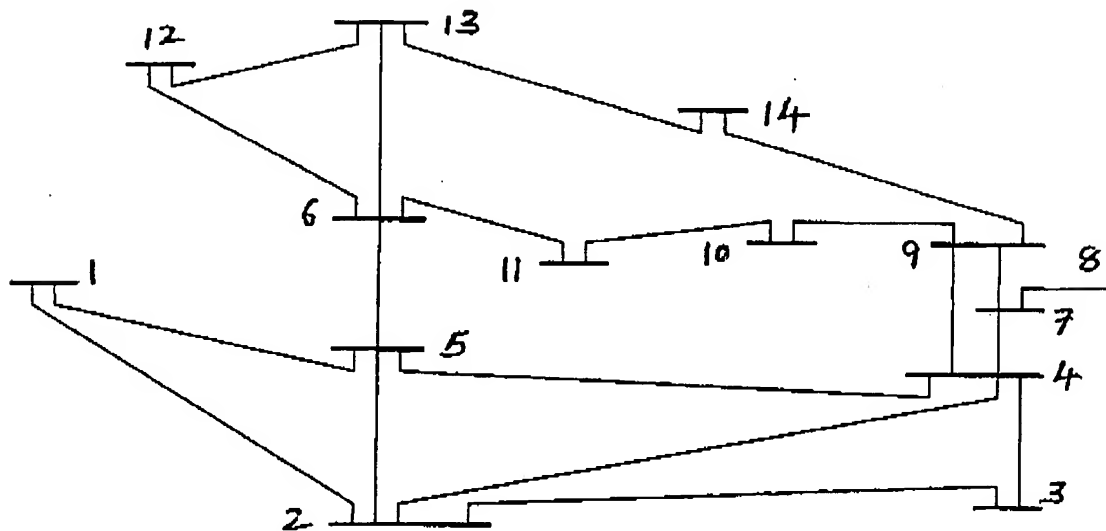


**Fig.1b: Prior Art: Flow-chart of Super Super Decoupled Loadflow (SSDL) method**  
(Cont.)

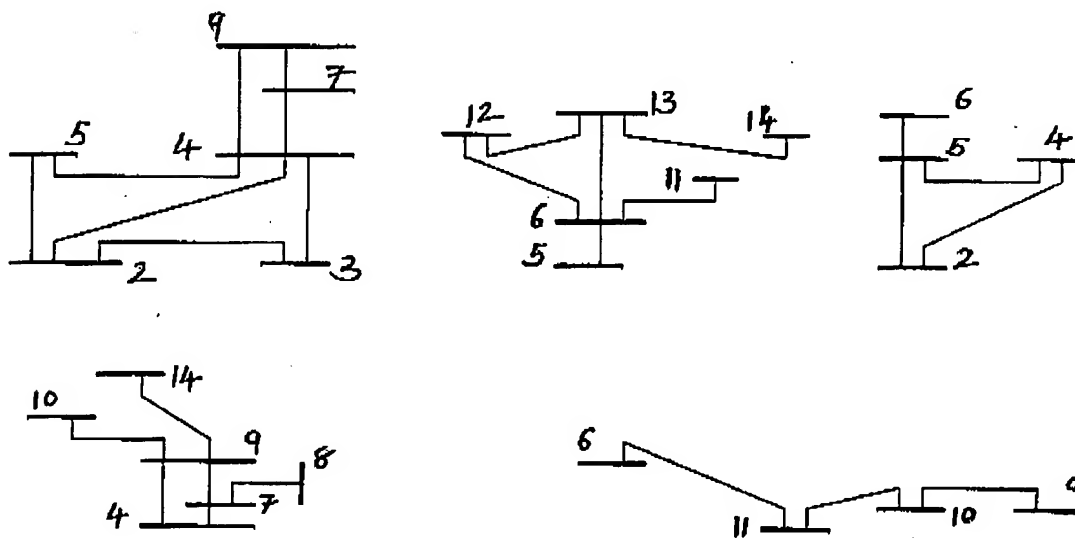
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**Fig. 2a:** One-line diagram of IEEE 14-node network

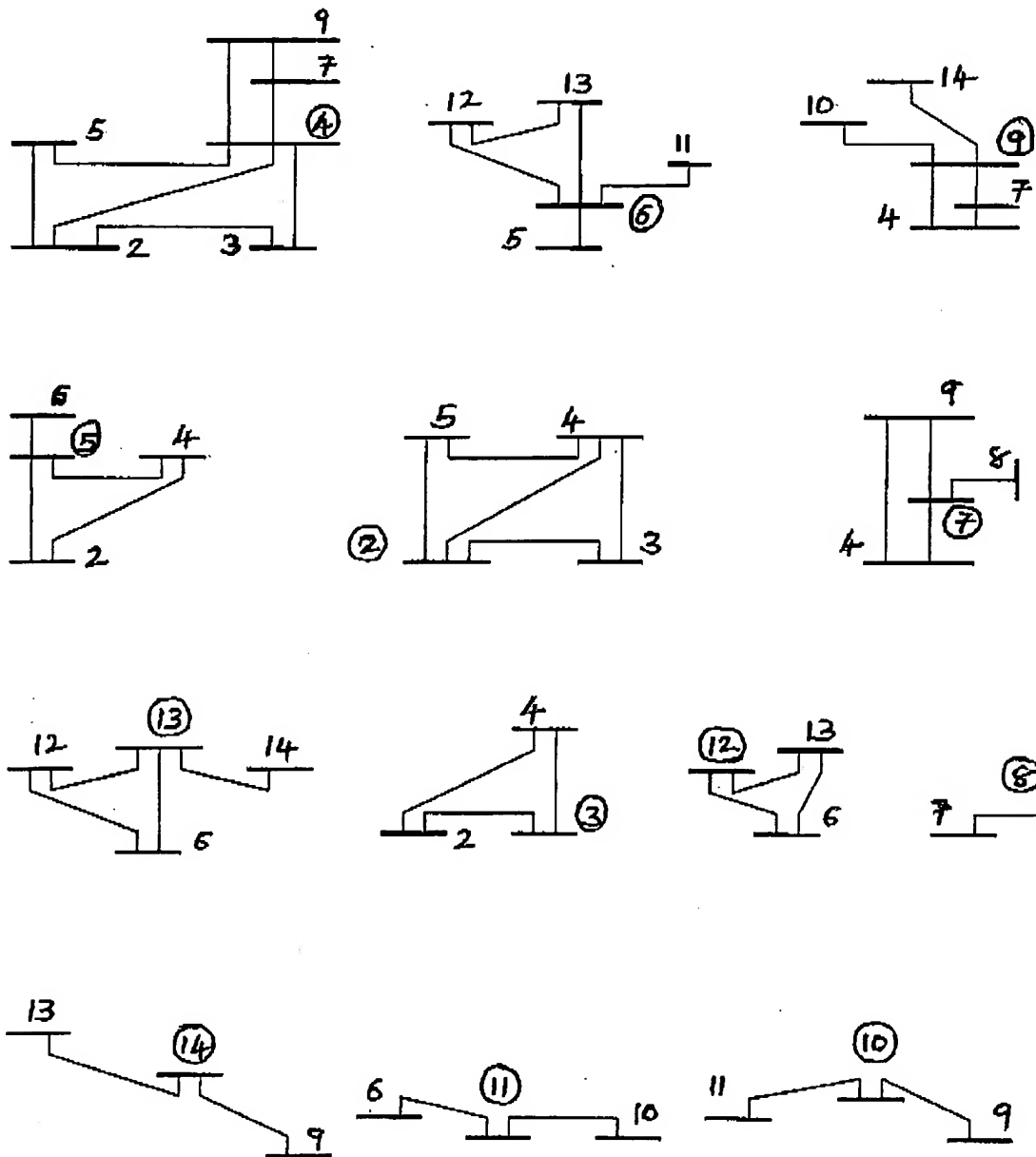


**Fig. 2c:** Non-redundant Level-1 sub-networks of fig. 2b are regrouped to reduce the number of processors required without increasing the number of nodes in any regrouped sub-network larger than the original largest sub-network of 6-nodes

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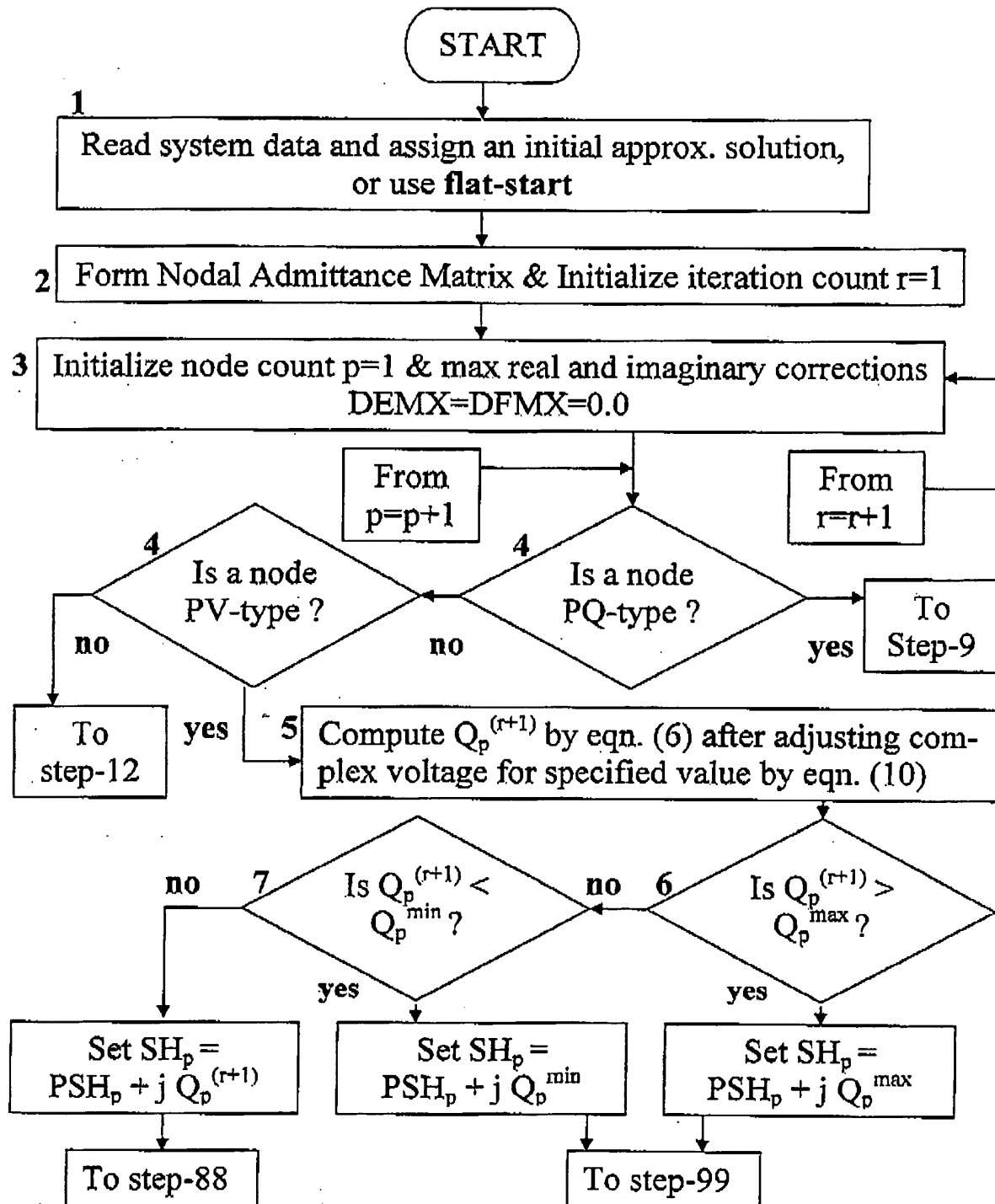


**Fig. 2b: Level-1 sub-networks around circled nodes  
for the network of fig. 2a**

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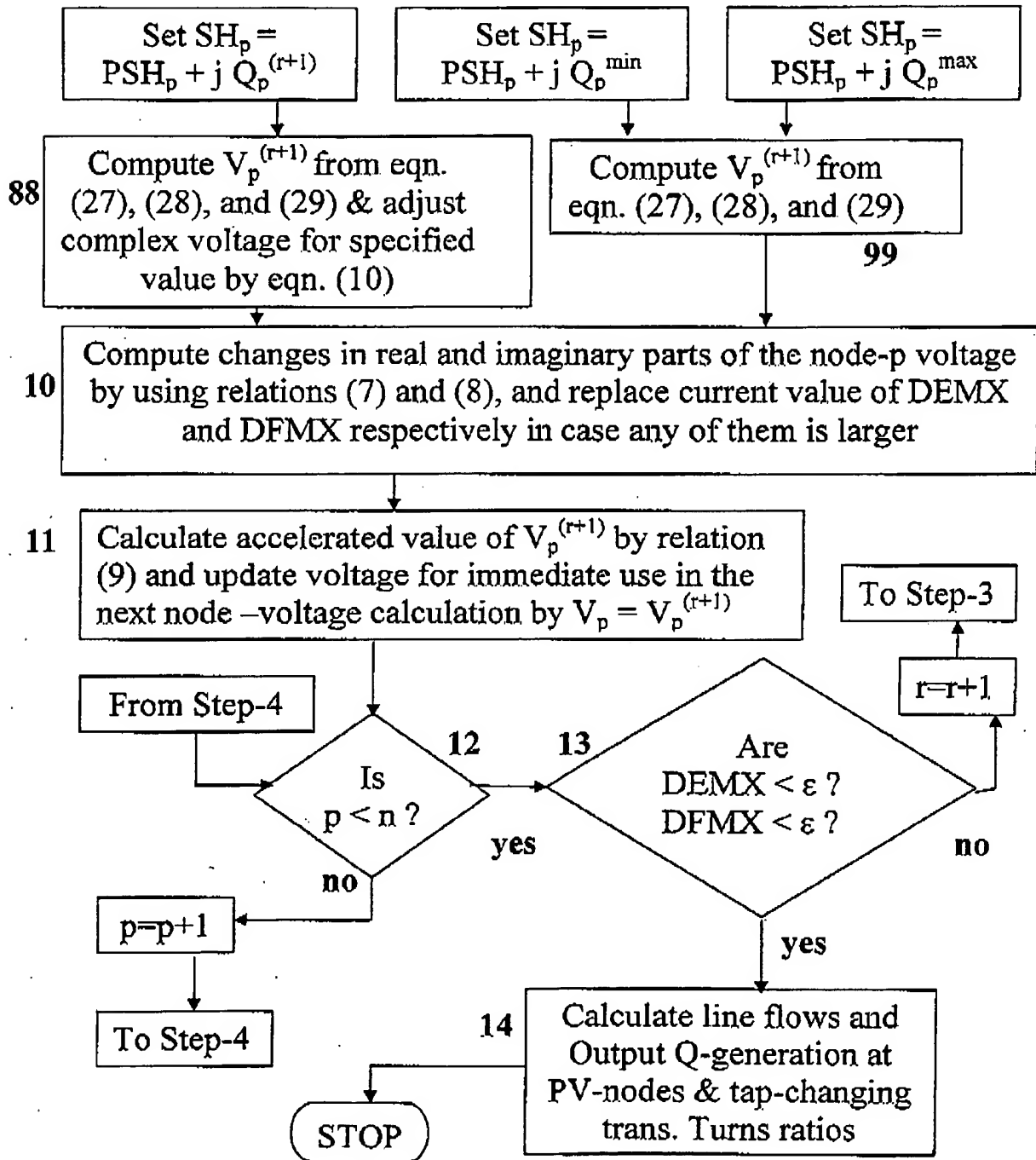


**Fig.3a: Invention: Flow-chart of Gauss-Seidel-patel Loadflow (GSPL) Method**

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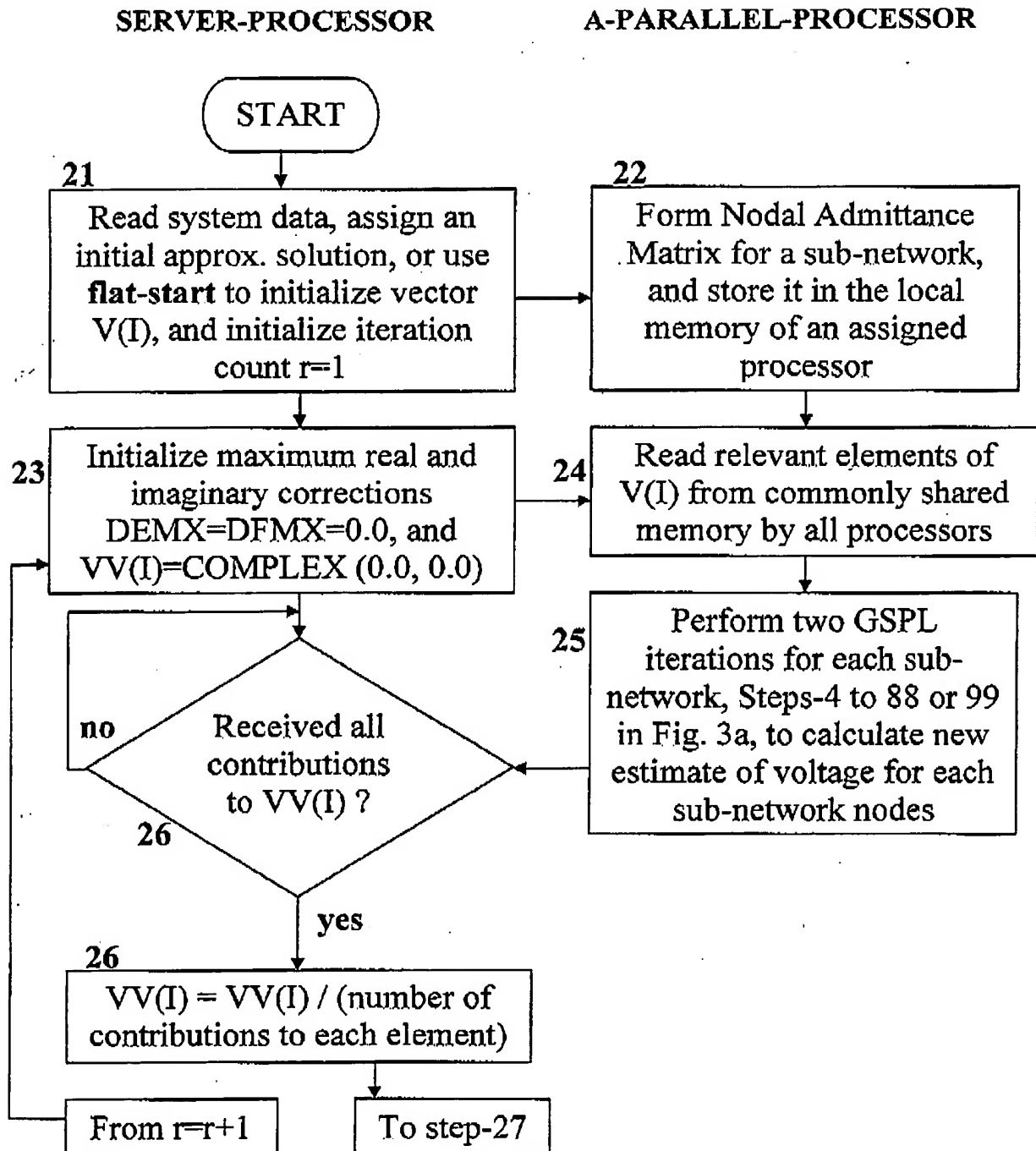
**Fig.3a: Invention: Flow-chart of Gauss-Seidel-patel Loadflow (GSPL) Method**  
(Cont.)



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**Fig.3b: Invention: Flow-chart of Parallel-Gauss-Seidel-Patel Loadflow (PGSPL) Method**

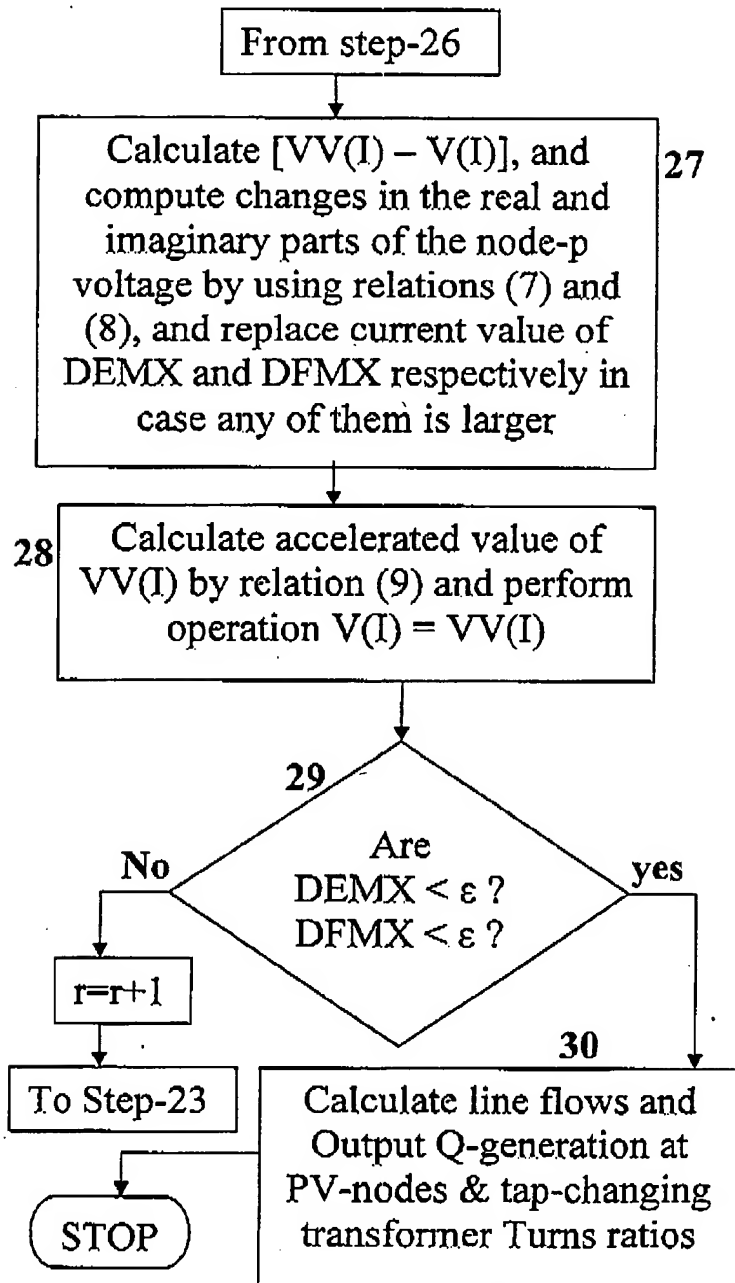
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SERVER-PROCESSOR

A-PARALLEL-PROCESSOR

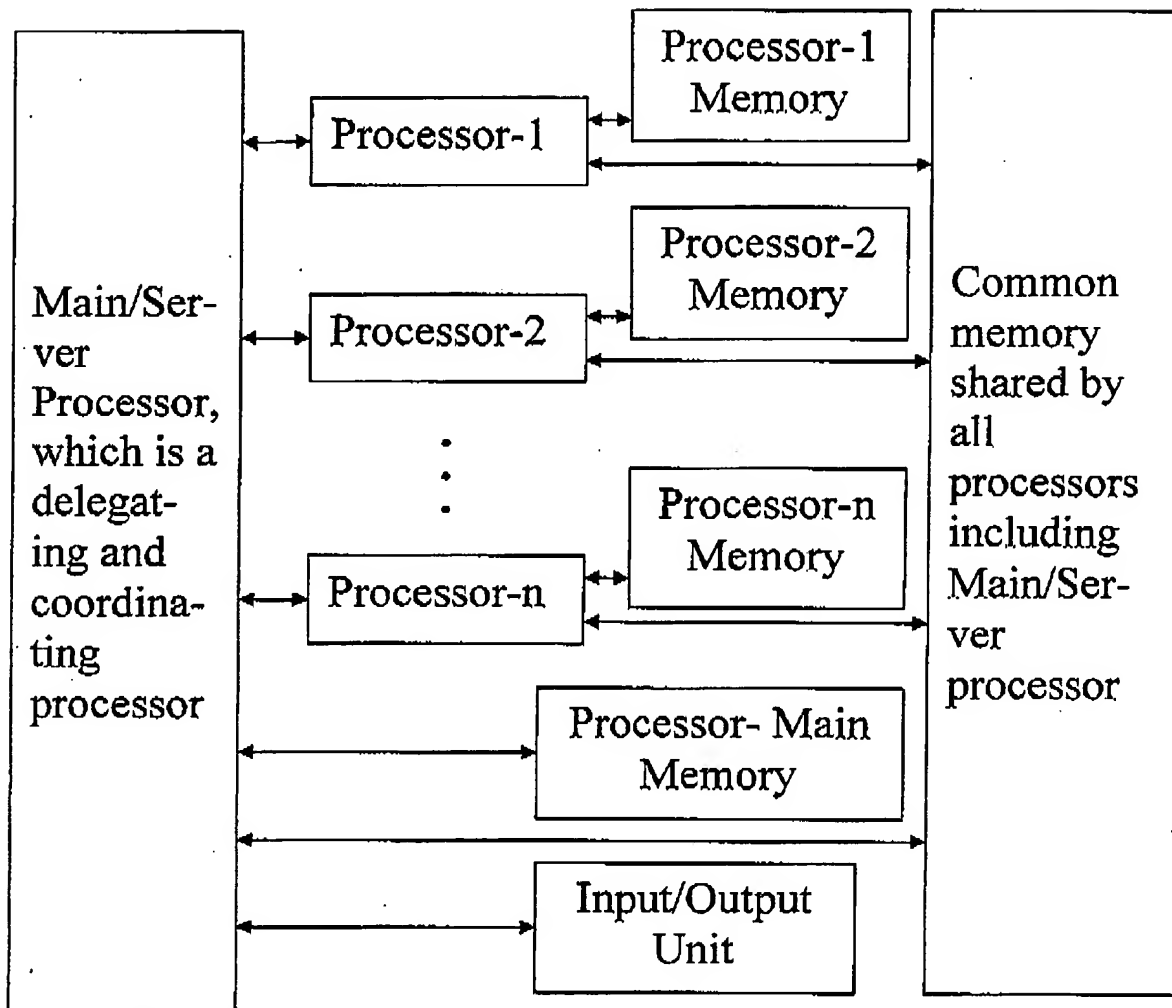


**Fig.3b:** Invention: Flow-chart of Parallel-Gauss-Seidel-Patel Loadflow (PGSPL) Method  
(Cont.)

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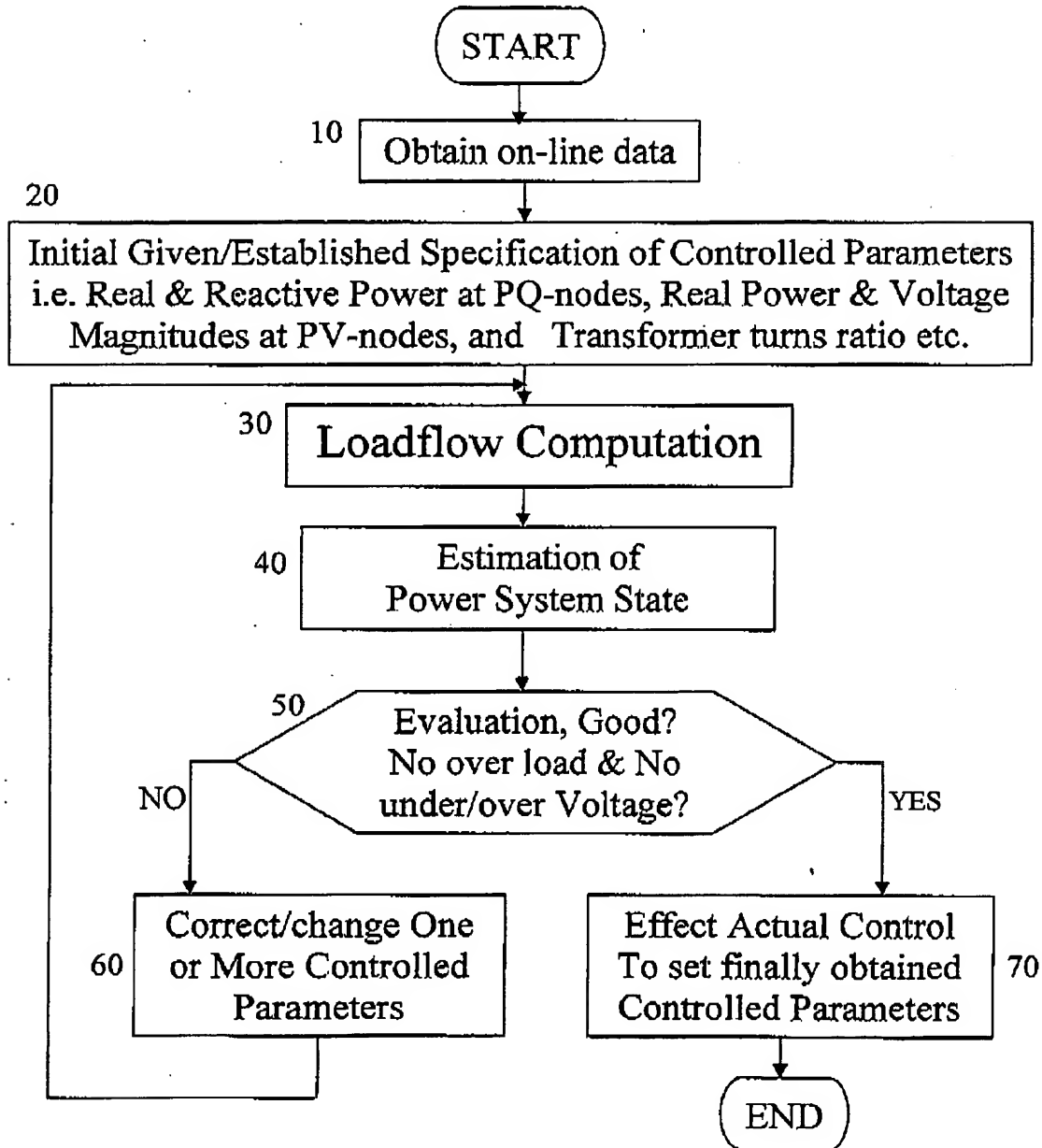


**Fig. 4: Invented Parallel computer Architecture /organization**

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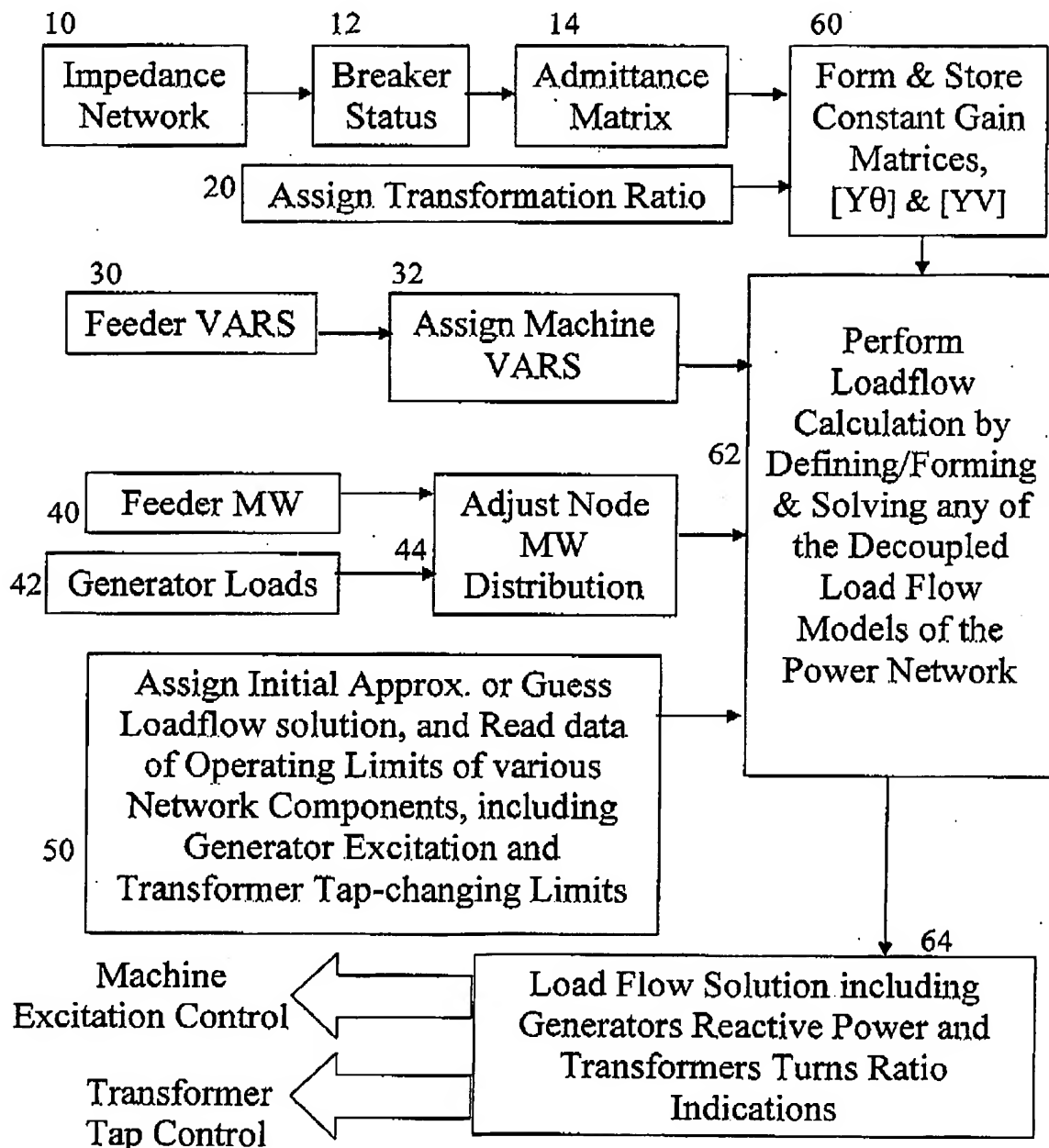


**Fig.5: Prior Art: Loadflow Computation in Power Flow Control and/or Voltage Control in Electrical Power System**

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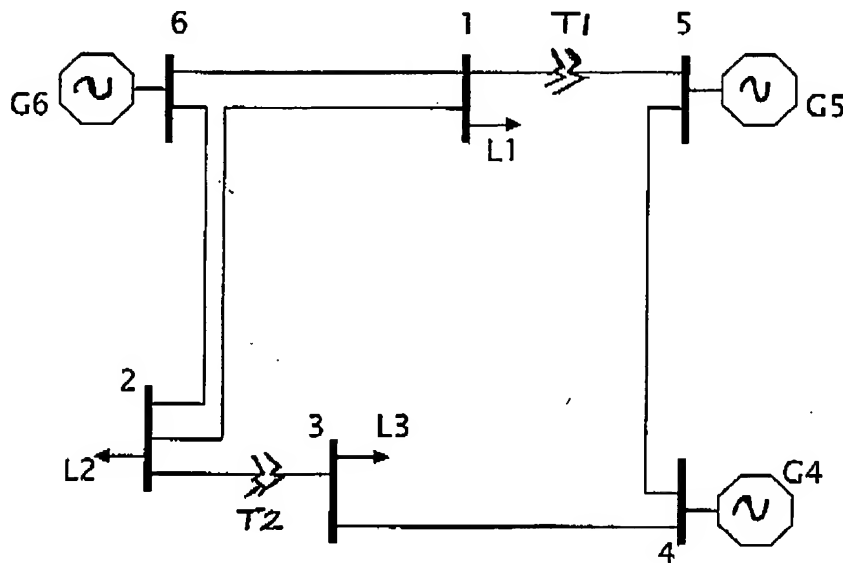


**Fig. 6: Prior Art: Load-Flow Computation for Voltage Control in Electrical Power System**

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**Fig. 7: Prior Art: An Exemplary 6-node Power System**

**Nodes: 1, 2, 3 are PQ-nodes; arrows extending outwards L1, L2, L3 are connected loads including Electrical Motor loads**

**Nodes: 4 and 5 are PV-nodes, where equivalent plant generators G4 and G5 are connected**

**Nodes: 6 is the reference/slack/swing node, where equivalent biggest plant generator G6 is connected**

**T1 and T2 are tap-changing Transformers controlling voltages of nodes 1 and 2 respectively**